

Notice of Allowability

Application No.

10/756,383

Examiner

Yaritza Guadalupe McCall

Applicant(s)

JAKLITSCH ET AL.

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment After Final filed January 19, 2006.
2. ☒ The allowed claim(s) is/are 1,3-7,15-19,21 and 22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

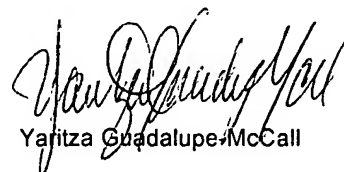
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Yaritza Guadalupe McCall

DETAILED ACTION

In response to Amendment After Final filed January 19, 2006

Comments

1. It is noted that the After Final Communication filed by Applicant on January 19, 2006 recites the title "Improved Implementation of Gyroscopic Systems for Boresighting Equipment", which differs from the title of record, "Gyroscopic Systems for Boresighting Equipment", used during prosecution. A telephone conversation with Mr. Jeff Kaminski, attorney of record, certifies that this should be considered a typographical error or misprint and should not be considered a request to change the title.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:
- a. Claims 1 and 3 - 7 are allowable over the Prior Art of Record because it fails to teach or suggest a gyroscopic system for translating parallel and non-parallel lines between a reference line and a device to be aligned with respect to the reference line, comprising a first inertial sensor configured to be substantially stationary, a second inertial sensor, and a control circuit operable to process output signals generated by said

collimator and said first and second three-axis gyroscopic sensors, to provide steering commands to the gimbal drive system to move the gimbal about its two physical axes such that the reflector and beam have a fixed orientation to perform calculations to compensate for a third physical axis, and determine relative orientations of said first and second inertial sensors with respect to each other in combination with the remaining limitations of the claims.

b. Claims 15 - 18 are allowable over the Prior Art of Record because it fails to teach or suggest a method for reference sighting comprising the steps of determining a nominal mirror line in a base frame for each reference mirror; measuring a first measurement vector for the first reference mirror; logging an orientation of the first gyro and the second gyro at the time of the measuring; converting the measurement vector to quaternion form; computing an actual mirror line with respect to the nominal mirror line; virtually de-rolling the orientation of the second gyro; and causing the optical reference line to converge on the nominal mirror line in combination with the remaining limitations of the claims.

c. Claims 19 and 21 - 22 are allowable over the Prior Art of Record because it fails to teach or suggest a method for aligning a device comprising the step of determining the relative position of said portable inertial sensor with respect to said stationary inertial sensor using the detected angle and output data from a first gyroscope provided in said

stationary inertial sensor and a second gyroscope provided in said portable inertial sensor in combination with the remaining limitations of the claims.

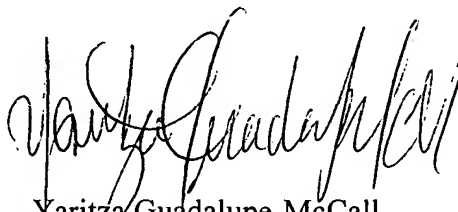
3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe McCall whose telephone number is (571)272-2244. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Yaritza Guadalupe-McCall', is written over the printed name.

Yaritza Guadalupe-McCall
Patent Examiner
Art Unit 2859

YGM
February 1, 2006